

In the Claims:

Please cancel non-elected claims 24-26, 35-67 and 76. without prejudice or disclaimer.

Claims 27-34 and 68-75 are pending in the application and are included below for the Examiner's convenience. Claims 70-75 are amended below:

1-23. (Cancelled)

24-26. (Cancelled)

27. (Previously added) A method of evaluating an herbal composition comprising comparing marker data generated by exposing a biosystem to the herbal composition to a standardized herbal bioresponse array for the same or substantially the same herbal composition.

28. (Previously added) A method of evaluating an herbal composition comprising:

- a) exposing a biosystem to a batch of the herbal composition and collecting data on two or more markers;
- b) storing the marker data of step a) as an HBR Array; and
- c) comparing the HBR Array generated in step b) with a standardized HBR Array for the same or a substantially same herbal composition as that of the batch herbal composition.

29. (Previously added) The method of claim 28, further comprising predicting the BioResponse of the batch herbal composition.

30. (Previously added) The method of claim 25 or 28, wherein the markers are selected from the group consisting of molecular, cytogenetic and biochemical markers.

31. (Previously added) The method of claim 25 or 28, wherein the standardized HBR Array further comprises information on plant-related data.

32. (Previously added) The method of claim 31, wherein the information on plant-related data is selected from one or more of the following: chemical testing, the part of the plant used, the growing conditions of one or more of the individual herbs in the characterized herbal composition, the pre-harvest treatment of one or more of the individual herbs in the herbal composition, the post-harvest treatment of one or more of the individual herbs in the herbal composition, the post-harvest treatment of the herbal composition, and the relative proportions of the individual herbs in the herbal composition.

33. (Previously added) The method of claim 25 or 28, wherein the BioResponse is selected from the group consisting of physiological responses, morphological responses, cognitive responses, motivational responses and autonomic responses.

34. (Previously added) The method of claim 25 or 28, wherein the biosystem is selected from the group consisting of cells, tissues, organs, whole organisms and *in vitro* assays.

35-67. (Cancelled)

68. (Previously added) A method of evaluating an herbal composition comprising comparing data comprising changes in gene expression generated by exposing a biosystem to the herbal composition to a standardized herbal bioresponse array for the same or substantially the same herbal composition.

69. (Previously added) A method of evaluating an herbal composition comprising:

- a) exposing a biosystem to a batch of the herbal composition and measuring the changes in gene expression;
- b) storing the changes in gene expression as an Herbal BioResponse Array (HBR Array); and
- c) comparing the HBR Array obtained in steps a) and b) with a standardized HBR Array for a substantially equivalent herbal composition.

70. (Currently amended) The method of claim ~~[61, 66 or]~~ 69, wherein the gene expression takes place transcriptionally.

71. (Currently amended) The method of claim ~~[61, 66 or]~~ 69, wherein the gene expression takes place translationally.

72. (Currently amended) The method of claim ~~[61, 66 or]~~ 69, wherein qualitative changes in gene expression are measured.

73. (Currently amended) The method of claim ~~[61, 66 or]~~ 69, wherein quantitative changes in gene expression are measured.

74. (Currently amended) The method of claim ~~[61, 66 or]~~ 69, wherein qualitative and quantitative changes in gene expression are measured.

75. (Currently amended) The method of claim ~~[61, 66 or]~~ 69, wherein the biosystem is selected from the group consisting of cells, tissues, organs, whole organisms and *in vitro* assays.

76. (Cancelled)

Please add the following new claims directed to the elected Group/Species:

77. (New) A method of evaluating the equivalency of two or more herbal compositions comprising:

- a) exposing a test cell to a first herbal composition;
- b) measuring mRNA expression levels for two or more genes of the exposed test cell of step a);
- c) calculating a first set of normalized values for the mRNA expression levels of the exposed test cell, wherein the calculation utilizes the mRNA expression values obtained

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in step b) and mRNA expression levels for two or more genes obtained from a control cell that has not been exposed to the herbal composition, wherein the two or more genes are the same as those measured in step b);

- d) exposing the test cell to a second herbal composition;
- e) measuring mRNA expression levels for two or more genes of the exposed test cell of step e), wherein the two or more genes are the same as those measured in step b);
- f) calculating a second set of normalized values for the mRNA expression levels of the exposed test cell, wherein the calculation utilizes the mRNA expression values obtained in step e) and mRNA expression levels for two or more genes obtained from a control cell that has not been exposed to the herbal composition, wherein the two or more genes are the same as those measured in step b); and
- g) evaluating the equivalency of the first and second herbal compositions by comparing the first and second sets of normalized values.

78. (New) The method of claim 77 wherein the equivalency is evaluated by computing a score based on the two sets of normalized values.

79. (New) The method of claim 77 further comprising computing a correlation value based on the two sets of normalized values.

80. (New) A method of evaluating an herbal composition comprising:

- a) exposing a test cell to the herbal composition;
- b) measuring mRNA expression levels for two or more genes of the exposed test cell of step a);
- c) calculating a set of normalized values for the mRNA expression levels of the test cell, wherein the calculation utilizes the mRNA expression values obtained in step b) and mRNA expression levels for two or more genes obtained from a control cell that has not been exposed to the herbal composition, wherein the two or more genes are the same as those measured in step b);
- d) evaluating the herbal composition based on normalized values.

81. (New) The method of claim 80 wherein the evaluation results in rejecting the herbal composition.

82. (New) The method of claim 80 wherein the evaluation results in accepting the herbal composition.